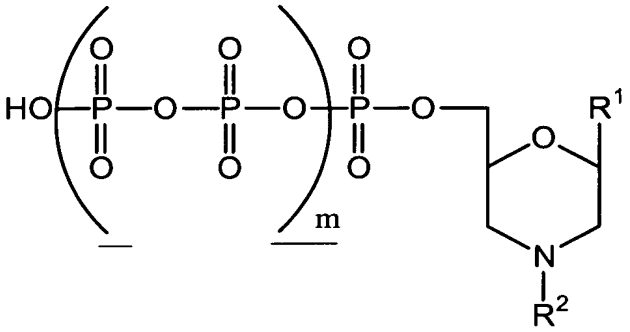
1. (Currently Amended) Process for manufacturing a ~~3'-labelled~~ nucleic acid ~~(DNA or RNA)~~ fragment, which comprises the enzymatic incorporation of a nucleotide derivative having as precursor a compound of formula:



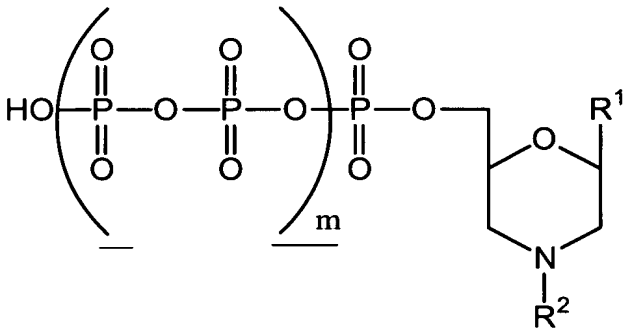
(I)

in which R^1 represents a nucleic base, m is 1 and R^2 is selected from the ~~represents a~~ group consisting of ~~corresponding to one of the following formulae~~:

$-(CH_2)_n-NH_2$		$-(CH_2)_n-SH$
$-(CH_2)_n-COOH$		$-(CH_2)_n-OH$
$-(CH_2)_n-NH-R^3$		$-(CH_2)_n-SR^3$
$-(CH_2)_n-CO-R^3$	and	$-(CH_2)_n-OR^3$

in which n is an integer ranging from 1 to 12 and R^3 is selected from the ~~a~~ group consisting of ~~derived from~~ a label, a protein, an enzyme, a fatty acid ~~or~~ and a peptide, at the 3' OH end of the nucleic acid fragment.

2. (Currently Amended) Process for modifying a nucleic acid fragment by enzymatic incorporati~~o~~nng at the 3' end of the nucleic acid fragment a modified morpholino nucleotide having as precursor a compound corresponding to the formula:



(I)

in which R^1 represents a nucleic base, m is 1 and R^2 is selected from the group consisting of ~~represents a group corresponding to one of the following formulae~~:

$-(CH_2)_n-NH-R^3$

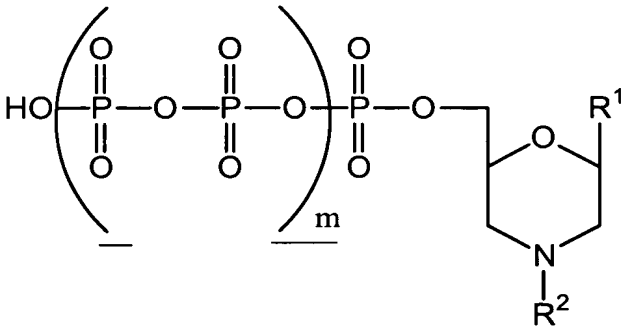
$-(CH_2)_n-CO-R^3$

$-(CH_2)_n-SR^3$

and $-(CH_2)_n-OR^3$

in which n is an integer ranging from 1 to 12 and R^3 is selected from the group consisting of ~~represents a compound chosen from~~ photo-crosslinking agents, fatty acids, hydrophobic peptides, antibodies, enzymes and fluorophores.

3. (Currently Amended) Process for sequencing a nucleic acid ~~(DNA or RNA)~~ by the technique of enzymatic polymerization of the sequence complementary to this nucleic acid using chain terminators, in which at least one of the chain terminators has as precursor a compound corresponding to the formula:



(I)

in which R^1 represents a nucleic base, m is 1 and R^2 is selected from the ~~represents a~~ group consisting ~~corresponding to one~~ of ~~the following formulae~~:

$-(CH_2)_n-NH_2$		$-(CH_2)_n-SH$
$-(CH_2)_n-COOH$		$-(CH_2)_n-OH$
$-(CH_2)_n-NH-R^3$		$-(CH_2)_n-SR^3$
$-(CH_2)_n-CO-R^3$	and	$-(CH_2)_n-OR^3$

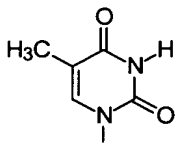
in which n is an integer ranging from 1 to 12 and R^3 is selected from the group consisting of ~~a group derived from~~ a label, a protein, an enzyme, a fatty acid ~~or~~ and a peptide.

4. (Currently Amended) Process according to Claim 1, in which ~~the~~ an enzyme of said enzymatic incorporation is the Klenow fragment of DNA polymerase.

5. (Currently Amended) Process according to Claim 1, in which ~~the~~ an enzyme of said enzymatic incorporation is selected from the group consisting of a heat-resistant polymerase of a Thermophilus bacterium, a ~~or~~ terminal transferase and ~~or~~ reverse transcriptase.

6. (Currently Amended) Process according to Claim 1, in which the nucleic base is a natural nucleic base selected from the group consisting of ~~chosen from~~ adenine, guanine, cytosine, thymine, uracil, xanthine, hypoxanthine and 2-aminopurine, and derivatives thereof.

7. (Currently Amended) Process according to Claim 1, in which R^1 is selected from the group consisting of ~~corresponds to one of the following formulae~~: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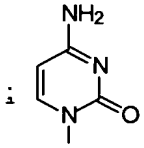
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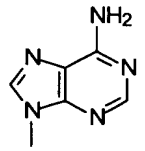
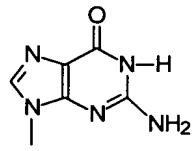

A

and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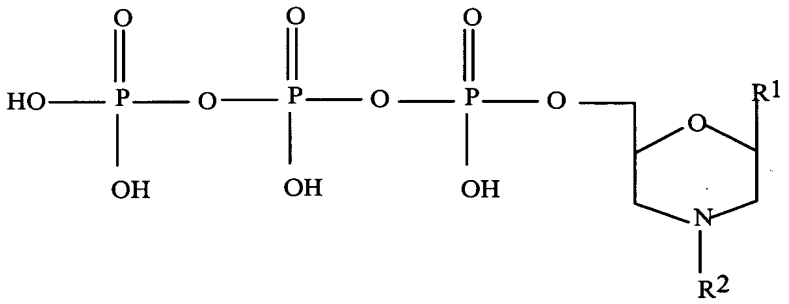
8. (Currently Amended) Process according to Claim 1, in which the label is selected from the group consisting of ~~chosen from~~ radioactive products, luminescent products, electroluminescent and fluorescent products, molecules capable of coupling with other molecules, molecules which allow interactions of the antigen-antibody type, and enzymatic labels.

9. (Currently Amended) Process according to Claim ~~1~~ 8, in which ~~R³~~ the label is a fluorophore.

10. (Currently Amended) Process according to Claim 9, in which R^3 is selected from the group consisting of ~~chosen from~~ fluorescein ~~derivatives~~, biotin ~~derivatives~~ and rhodamine ~~derivatives~~.

11. (Currently Amended) Process according to Claim 1, in which the nucleotide derivative~~, the modified morpholino-nucleotide or the chain terminator~~ is compound (I) in ~~monophosphate form~~ which m is 0.

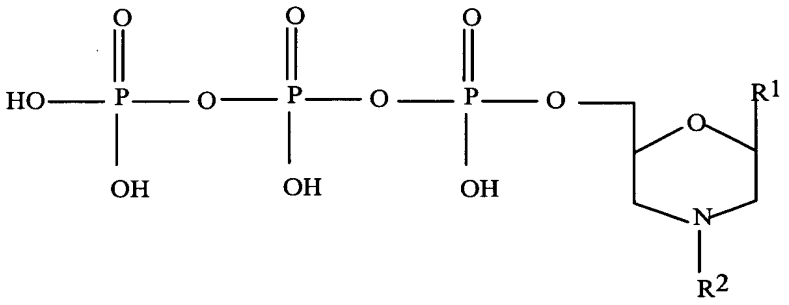
12. (Currently Amended) Morpholino-nucleotide corresponding to the formula:



(I)

in which R^1 is adenine and R^2 represents $-CH_2-COOH$, $-(CH_2)_4-NH_2$ or $-(CH_2)_4-NH-R^3$ ~~with~~ wherein R^3 ~~representing a group derived from~~ is fluorescein.

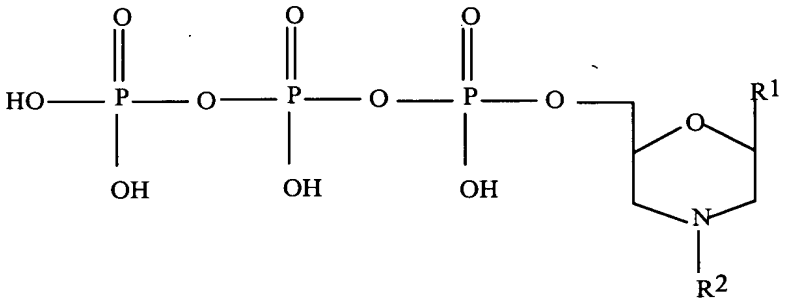
13. (Currently Amended) Morpholino-nucleotide of formula:



(I)

in which R^1 is thymine and R^2 represents $-CH_2-COOH$, $-(CH_2)_4-NH_2$ or $-(CH_2)_4-NH-R^3$ ~~with~~ wherein R^3 ~~representing a group derived from~~ is fluorescein.

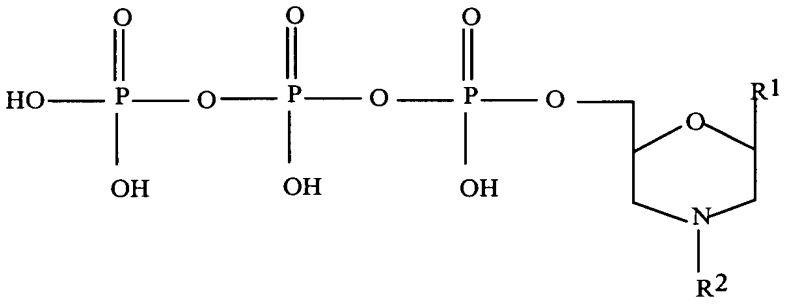
14. (Currently Amended) Morpholino-nucleotide corresponding to the formula:



(I)

in which R^1 is cytosine and R^2 represents $-CH_2-COOH$, $-(CH_2)_4-NH_2$ or $-(CH_2)_4-NH-R^3$ ~~with~~ wherein R^3 ~~representing a group derived from~~ is fluorescein.

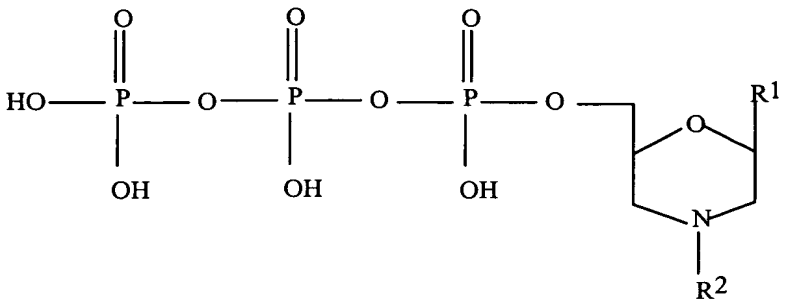
15. (Currently Amended) Morpholino-nucleotide corresponding to the formula:



(I)

in which R^1 is guanine and R^2 represents $-CH_2-COOH$, $-(CH_2)_4-NH_2$ or $-(CH_2)_4-NH-R^3$ ~~with~~ wherein R^3 ~~representing a group derived from~~ is fluorescein.

16. (Currently Amended) Process for manufacturing a morpholino-nucleotide of formula (I):



(I)

in which R^1 represents a nucleic base and R^2 is selected from the ~~represents a~~ group consisting of ~~corresponding to one of the following formulae~~:

~~$-(CH_2)_n-NH_2$~~ ~~$-(CH_2)_n-SH$~~

~~$-(CH_2)_n-COOH$~~ ~~$-(CH_2)_n-OH$~~

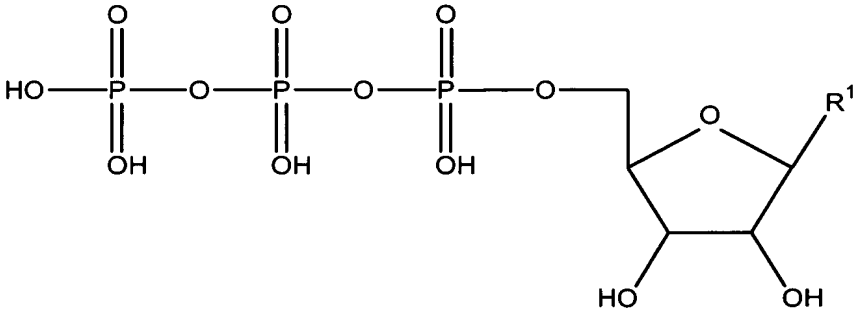
$-(CH_2)_n-NH-R^3$ $-(CH_2)_n-SR^3$

$-(CH_2)_n-CO-R^3$ and $-(CH_2)_n-OR^3$

in which n is an integer ranging from 1 to 12 and R^3 is selected from the ~~a~~ group consisting of ~~derived from~~ a label, ~~from a protein~~, ~~from~~ an enzyme, and ~~from~~ a fatty acid ~~or from a peptide~~,

said process comprising ~~the reaction of~~

a) reacting a nucleoside triphosphate of formula (II):



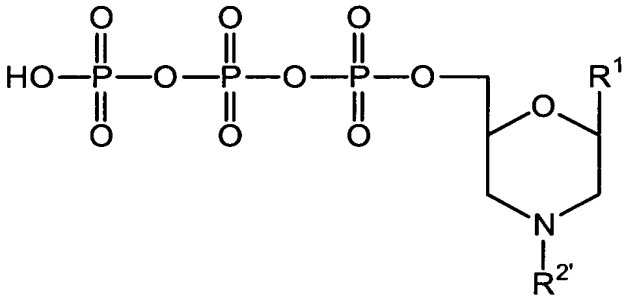
II

wherein ~~in which~~ R^1 has the meaning given above, with a periodate, a compound of formula ~~R^2-NH_2 in which R^2 has the meaning given above~~ $R^{2'}NH_2$, wherein $R^{2'}$ is selected from the group consisting of:

$-(CH_2)_n-NH_2$ $-(CH_2)_n-SH$

$-(CH_2)_n-COOH$ and $-(CH_2)_n-OH$,

and sodium borohydride to form a morpholino-nucleotide of formula (III):



(III)

wherein $R^{2'}$ has the meaning given above;

b) isolating the morpholino-nucleotide of formula (III); and

c) attaching to the morpholino-nucleotide of formula (III) the label, the enzyme and the fatty acid to form the morpholino-nucleotide of formula (I).

17. (Cancelled)

18. (Currently Amended) Process according to claim 2, in which ~~the~~ an enzyme of said enzymatic incorporation is the Klenow fragment of DNA polymerase.

19. (Currently Amended) Process according to Claim 3, in which ~~the~~ an enzyme of said technique of enzymatic polymerization is the Klenow fragment of DNA polymerase.

20. (Currently Amended) Process according to Claim 2, in which ~~the~~ an enzyme of said enzymatic incorporation is selected from the group consisting of a heat-resistant polymerase of a Thermophilus bacterium, a ~~or~~ terminal transferase and ~~or~~ reverse transcriptase.

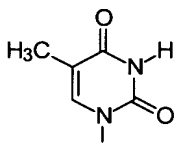
21. (Currently Amended) Process according to Claim 3, in which ~~the~~ an enzyme of said technique of enzymatic polymerization is selected from the group consisting of a heat-resistant polymerase of a Thermophilus bacterium, a ~~or~~ terminal transferase and ~~or~~ reverse

transcriptase.

22. (Currently Amended) Process according to Claim 2 in which the nucleic base is a natural nucleic base selected from the group consisting of ~~chosen from~~ adenine, guanine, cytosine, thymine, uracil, xanthine, hypoxanthine and 2-aminopurine, and derivatives thereof.

23. (Currently Amended) Process according to Claim 3 in which the nucleic base is a natural nucleic base selected from the group consisting of ~~chosen from~~ adenine, guanine, cytosine, thymine, uracil, xanthine, hypoxanthine and 2-aminopurine, and derivatives thereof.

24. (Currently Amended) Process according to Claim 2 in which R^1 is selected from the group consisting of ~~corresponds to one of the following formulae~~: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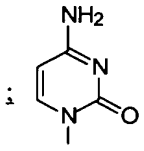
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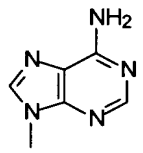
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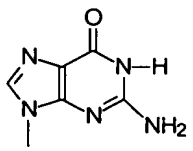
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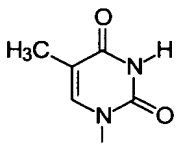
25. (Currently Amended) Process according to Claim 3 in which R^1 is selected from the group consisting of ~~corresponds to one of the following formulae~~: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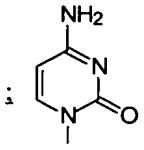
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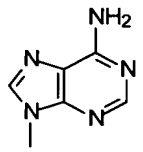
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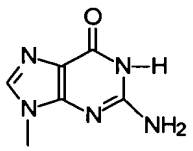
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26. (Currently Amended) Process according to Claim 2, in which the label is selected from the group consisting of ~~chosen from~~ radioactive products, luminescent products, electroluminescent and fluorescent products, molecules capable of coupling with other molecules, molecules which allow interactions of the antigen-antibody type, and enzymatic labels.

27. (Currently Amended) Process according to Claim 3, in which the label is selected from the group consisting of ~~chosen from~~ radioactive products, luminescent products, electroluminescent and fluorescent products, molecules capable of coupling with other molecules, molecules which allow interactions of the antigen-antibody type, and enzymatic labels.

28. (Original) Process according to Claim 2, in which R^3 is a fluorophore.

29. (Original) Process according to Claim 3, in which R^3 is a fluorophore.90

30. (Currently Amended) Process according to Claim 28, in which R^3 is selected from the group consisting of ~~chosen from~~ fluorescein ~~derivatives~~, biotin ~~derivatives~~ and rhodamine ~~derivatives~~.

31. (Currently Amended) Process according to Claim 29, in which R^3 is selected from the group consisting of ~~chosen from~~ fluorescein ~~derivatives~~, biotin ~~derivatives~~ and rhodamine ~~derivatives~~.

32. (Currently Amended) Process according to Claim 2, in which ~~the derivative,~~ the modified morpholino-nucleotide ~~or the chain terminator~~ is compound (I) in ~~monophosphate form~~ which m is 0.

33. (Currently Amended) Process according to Claim 3, in which ~~the derivative, the~~

~~modified morpholino-nucleotide or~~ said at least one of the chain terminators is compound (I) in ~~monophosphate form~~ which m is 0.